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FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For:
Claiborne County Schools

Prepared By:
Tommy Walker

Time Period Covered by This Plan:
2012 - 2021

Date Plan Prepared:
2012-02-16

Plan Type:
Stewardship / Stewardship

This plan was developed in accordance with the rules of the Stewardship program.

Property Name: Section 57-T11N-R2E

MISSISSIPPI FOREST STEWARDSHIP PROGRAM

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LANDOWNER INFORMATION

Name:	Claiborne County Schools	
Mailing Address:	P.O. Box 337	
City, State, Zip:	Port Gibson, MS 39150	
Country:	United States of America	
Contact Numbers:	Home Number:	601-437-4352
	Office Number:	
	Fax Number:	
E-mail Address:		
Social Security Number (optional):		

FORESTER INFORMATION

Name:	Tommy Walker , Forester II	
Forester Number:	01473	
Street Address:	P.O. Box 77	
City, State, Zip:	Vicksburg, MS 39181	
Contact Numbers:	Office Number:	601-638-1227
	Fax Number:	
E-mail Address:		

PROPERTY LOCATION

County:	Claiborne	Total Acres:	616	Latitude:	-91.03	Longitude:	31.89
Section:	57	Township:	11N	Range:	2E		

DISCLAIMER

This plan is intended to be flexible. It may be modified to meet changes in economic conditions, management goals, or other circumstances. The figures in this plan are only estimates. They can and will change. Therefore, any plans or budgets that use these figures should be tempered with that thought.

INTRODUCTION

This Forest Stewardship Management Plan will serve as a guide for accomplishing the goals and objectives for your property. In addition to addressing your specific goals and objectives, this plan includes recommendations for maintaining soil and water quality and protecting your forest from insects, disease, and wildfire. Recommendations are based on observation and assessment of the site.

OBJECTIVES

Timber Production

The goal is to produce high quality sawtimber. This will be accomplished through reforestation and timber stand improvement practices such as herbicide applications, prescribed burning, thinning at specified intervals, and other silvicultural practices.

Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

Wildlife Management - General
The goal is to provide a diversity of habitats suitable for a variety of game and non-game wildlife species. Habitat management will focus on developing a variety of food, cover, water, and space. This will be accomplished by establishing and maintaining access roads and firelanes, providing openings within the forest, and the management of trees located within Streamside Management Zones.

PROPERTY DESCRIPTION

General Property Information
This section is located on Russum Westside Road in the southwest part of the county. It is commonly known as Section 57. This section contains approximately 616 acres of land, of which, 556 acres is forest land. The 60 acres of nonforest land consists of primarily county roads, the Natchez Trace, and a powerline. The primary access roads are Russum Westside Road and Old Colony Road, which are county roads.
The terrain on this section is gently rolling to steep. The timber types range from Bluff Hardwood to Loblolly Pine. It is part of the loess bluff hills. Therefore, the soils are highly productive and highly erodible.

Water Resources
This section has several perennial streams, intermittent streams, and drains running throughout the property. All water resources will be managed in accordance with Mississippi's Best Management Practices.

Timber Production
The goal is to maximize the production of high quality timber. This will be accomplished through the application of timely thinning and other silvicultural practices designed to enhance timber quality and growth. Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

Threatened and Endangered Species
No threatened and endangered species were identified during the reconnaissance and evaluation of your property.

Interaction with Surrounding Property
Prescribed practices should be carried out in a manner that will minimize adverse impacts on surrounding properties. Consideration should be given to potential air, water, visual, and other impacts. In addition, practices carried out should have positive effects on the surrounding community such as improved wildlife habitat and soil stabilization.

Soils General
Soils were evaluated on the property to determine the suitability of the site for the proposed activities. Forest practices were planned so as to minimize erosion or other

adverse effects on the soil. The following soils are identified for this property: Memphis, Natchez, and Collins silt loams are the primary soils on this property located in the Loess Bluff Hills. These soils are very productive sites for both hardwood and Loblolly Pine. The Cherrybark Oak site index is over 100' and the Loblolly Pine site index is near 95'. The primary tree species for this tract are Cherrybark Oak, Shumard Oak, Water Oak, White Oak, Yellow Poplar,Green Ash, and Loblolly Pine.

Archeological and Cultural Resources
These areas can range from churches, old cemeteries, natural springs, Indian mounds to home sites or other areas of historical significance.

The Natchez Trace crosses the section in the southeast corner. No other areas of historical significance have been located on this section.

GENERAL PROPERTY RECOMMENDATIONS

Forest Protection
A healthy, vigorously growing stand is the best defense to an attack from a variety of forest insects, plants and pathogens.

Insects and Diseases

Trees are subject to attack from insects and diseases. Different insects and diseases affect trees according to the age, species, and condition of the trees. Planted stands of pines and pure stands of hardwoods are particularly susceptible to attack. Since there are many different insects and diseases, no attempt will be made here to explain all of them. The property should be inspected at least annually for possible signs of insect and disease activity. Some things to look for are:

- Unseasonable leaf fall
- Discoloration of leaves or needles
- Pitch pockets on pine trees
- Heavy defoliation of hardwood leaves
- Groups of three or more dying trees within a stand

This list does not cover all instances of insect or disease attacks. If anything unusual is noticed, report it to a forester. In most cases, insect and disease problems can be controlled if discovered early.

Fire Protection

Your forest should be protected from wildfire at all times. The best way to protect your investment is by establishing and maintaining firebreaks around the property. Guidelines for establishment and maintenance of firebreaks may be found in Mississippi Forestry Commission publication #107, *Mississippi's Best Management Practices.*

Grazing

Tree seedlings should be protected from grazing until such time as the terminal bud of the sapling is beyond reach of livestock. Domestic livestock should be denied access to the tree planting areas.

Boundary Lines

The Mississippi Forestry Commission has been maintaining the property boundaries on this section on a routine basis for many years. The property boundaries will be painted orange on a 6 year rotation beginning in 2012.

Water Quality Protection

The objective of the landowner is to protect, preserve and enhance all water sources on or transecting the property. This can best be achieved by implementation of Best Management Practices in all aspects of the management of the property.

Aesthetics

The goal is to assure that the property is managed in such a way that is aesthetically pleasing to the landowner as well as the community. Activities could include, maintaining buffer strips along the roads, planting wildflowers along the roads, and trees with attractive fall and spring color along the Natchez Trace.
A buffer strip is currently being maintained adjacent to the Natchez Trace to improve aesthetics. No timber activities are planned within this buffer strip for the next 10 years.

Ecological Restoration

Ecological restoration is the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed. A reconnaissance of the property has been conducted and no ecological restoration activities are recommended at this time.

Wildlife Mgt. Target Species

The objective of this practice is to provide habitat best suited for the featured or target species. Habitat management can focus on providing food, cover, water, and space to facilitate the target species.

Environmental Education

Environmental educational goals are to provide educational opportunities for children and adults through the development of items such as nature trails with tree identification markers, wildlife viewing areas, picnic areas, parking, public restroom facilities. There are no current plans to develop this section for environmental education.

Wildlife Management General

The goal is to provide a diversity of habitats suited for a variety of game and non-game wildlife species. Habitat management will focus on providing a variety of food, cover, water, and space. This will be accomplished, in part, by establishing and maintaining access roads and firelanes, providing openings within the forest, and leaving streamside management zones.

This section currently has 113 acres of streamside management zones which provide good travel corridors for wildlife. Also, wildlife is considered when determining the size and placement of regeneration harvests. Timber loading areas often make good areas for wildlife food plots. There is currently less than 5 acres of food plots on this section. However, the planned timber harvests will allow for more open areas that may be developed by the lessee for food plots, provided the hunters realize that these areas serve a dual purpose for hunting and for future timber loading areas.

Timber Management
Timber management goals for this property are to manage timber resources in such a manner as to maximize timber production on a sustained yield basis.

Recreation
The primary recreational use of this property is to generate income through a hunting lease.

SOIL TYPES

Memphis
The Memphis component makes up 90 percent of the map unit. Slopes are 5 to 8 percent. This component is on uplands. The parent material consists of loess deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria. Loblolly Site Index = 105.

Collins
The Collins component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of silty alluvium deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 42 inches during January, February, March, April. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.

Memphis
The Memphis component makes up 60 percent of the map unit. Slopes are 17 to 40 percent. This component is on uplands. The parent material consists of loess deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability

classification is 7e. This soil does not meet hydric criteria. The Natchez component makes up 30 percent of the map unit. Slopes are 17 to 40 percent. This component is on hillslopes. The parent material consists of loess deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.

STRATA

Strata 1

Strata Description

Strata 1 is comprised of Stands 1, 4, 12, 15, 16, and 17. It contains a total of 278 acres of two-aged bluff hardwood and scattered pine sawtimber.

Stand 4 was thinned in 2010 to initiate advanced natural regeneration. The species composition is good and the volume per acre is fair.

Stand 17 was thinned about 7 years ago. Much of the timber is relatively young. The species composition is good and the volume per acre is good.

The remaining stands have not been thinned for many years. The species composition and volume per acre range from poor to good in these stands.

The terrain in this strata is rolling to steep.

Strata Recommendations

The long term goal for this strata is to begin regenerating it stand by stand over the next 15-20 years, while thinning the better stands.

Activity Recommendations

In 2016, Stand 15 (42 acres) will be clearcut and regenerated and Stand 16 (27 acres) will be thinned along with Strata 2, Stand 10 (41 acres) and Strata 4, Stands 6 and 11 (105 acres).

In the thinning, the trees to remove are as follows: trees of undesirable species, poor quality and unhealthy trees of desirable species, high risk trees, and overmature trees of all species. At least 50 % crown cover should be left in all streamside management zones.

In 2017-2018, Stand 15 should be chemically site prepared with a chemical rate that will control cane and black locust and will not harm desirable hardwood regeneration. Then it can be hand planted with geneticly improved Loblolly Pine at a rate of 435 trees per acre (10'x10' spacing) to create a mixed hardwood/pine stand. A survival check will be conducted during the following fall/winter to ensure adequate stocking.

In 2017, Stands 1 and 4 (64 acres) will be clearcut and regenerated.

In 2018-2019, Stands 1 and 4 should be chemically site prepared with a chemical rate that will control cane and black locust and will not harm desirable hardwood regeneration. Then it can be hand planted with geneticly improved Loblolly Pine at a rate of 435 trees per acre (10'x10' spacing) to create a mixed hardwood/pine stand. A survival check will be conducted during the following fall/winter to ensure adequate stocking

In 2019, Stand 12 (78 acres) will be thinned. The trees to remove are as follows: trees of undesirable species, poor quality and unhealthy trees of desirable species, high risk trees, and overmature trees of all species. At least 50 % crown cover should be left in all streamside management zones.

In 2021, Stand 17 (68 acres) will be thinned. The trees to remove are as follows: trees of undesirable species, poor quality and unhealthy trees of desirable species, high risk trees, and overmature trees of all species. At least 50 % crown cover should be left in all streamside management zones.

Strata 2

Strata Description

Strata 2 is comprised of Stands 2, 3, and 10.

Stands 2 and 3 contain a total of 70 acres of 15 year old planted Loblolly pine and natural hardwood. The pine stocking ranges from poor to fair, while the hardwood stocking is good. The species composition is good. The total height ranges from 30-40 feet on some of the hardwood to over 50 feet on some of the pine. The dbh ranges from 4-8 inches for the pine and 3-6 inches for the hardwood.

Stand 10 contains a total of 40 acres of 20 year old planted and natural hardwood and scattered Loblolly pine pulpwood. The stocking and species composition ranges from low in areas that grew back with black locust to fair in other areas. The total height ranges from 30-40 feet. The dbh ranges from 4-8 inches.

Strata Recommendations

The long term goal for this strata is to maintain it as a mixed stand with periodic thinnings until around age 40. At that time, the pine should be rotated out, leaving a well stocked stand of hardwood sawtimber. The hardwood should be managed with thinnings until it is age 60-70.

Activity Recommendations

In 2015, Stands 2 and 3 should be thinned along with Strata 3, Stands 8 and 9 for a total of 109 acres. This will be a first thinning. Therefore, 15-20' wide corridors should be cut every 50-60' for access. The area between the corridors can be selectively harvested. The

selective harvest should focus on removing poor quality and unhealthy trees which are competing with desirable trees such as oak, pine, ash, and yellow poplar. This should be a crown thinning, not a ""thin from below". At least 80 square feet of basal area should be left after the harvest.

In 2016, Stand 10 should be thinned along with Stands 6,11, and 16. Stand 15 will also be clearcut as part of this sale. The total thinning acreage will be 173 acres, and the clearcut acreage will be 42 acres. The thinning in Stand 10 will be a first thinning. Therefore, 15-20' wide corridors should be cut every 50-60' for access. The area between the corridors can be selectively harvested. Stands 6, 11, and 16 will be selectively thinned by crown thinning. The selective harvest should focus on removing poor quality and unhealthy trees which are competing with desirable trees such as oak, pine, ash, and yellow poplar.

In 2020, Stands 2 and 3 should be thinned again, along with Strata 3, Stands 8 and 9. This thinning will be a selective crown thinning. The selective harvest should focus on removing poor quality and unhealthy trees which are competing with desirable trees such as oak, pine, ash, and yellow poplar.

Strata 3

Strata Description

Strata 3 is comprised of Stands 8 and 9. It contains a total of 39 acres of 19 year old Loblolly Pine and scattered hardwood pulpwood, which was thinned in 2010.

The species composition is good, and the stocking is good. The average merchantable height ranges from 35-40 feet. The average dbh ranges from 9-10 inches.

The terrain is steep over most of this strata. Therefore, much of the area did not get thinned in 2010.

Strata Recommendations

The long term goal for this strata is to continue thinning it periodically until it is age 35-40. Then it should be clearcut and regenerated along with the flatter portions of adjacent stands. This will create a much more manageable stand.

Activity Recommendations

This strata should be thinned in 2015 and 2020, along with Strata 2, Stands 2 and 3. Both of these thinnings should be crown thinnings leaving 70-80 square feet basal area of well spaced, healthy, dominant and codominant trees.

Strata 4

Strata Description

Strata 4 is comprised of Stands 6, 7, and 11. It contains 113 acres of two-aged bluff hardwood sawtimber. This strata lies adjacent to intermittant and perennial streams and is being used as a streamside management zone. Much of the timber is near maturity.

The species composition is fair to good. The volume per acre is fair. The terrain is flat in the major stream bottoms to steep along some of the upland gullies.

Strata Recommendations

The long term goal for this strata is to continue to maintain much of it as Streamside Management Zones (SMZ). As adjacent stands are clearcut over time, portions of this strata that are not needed for SMZs can be combined with them. The rest of the strata can be thinned as adjacent stands are harvested. At least 50% crown cover should be left in all SMZs.

Activity Recommendations

In 2016, Stands 6 and 11 (105 acres) should be thinned along with Stands 10 and 16. Stand 15 will also be clearcut as part of this sale. The trees to remove are as follows: trees of undesirable species, poor quality and unhealthy trees of desirable species, high risk trees, and overmature trees of all species. At least 50 square feet of basal area should be left in all streamside management zones.

Strata 5

Strata Description

Strata 5 is comprised of Stand 14. It contains a total of 16 acres of clearcut. Some desirable natural regeneration exists, but a large amount of black locust covers much of the area. Therefore, the site was chemically site prepared in the fall of 2011 with a chemical rate that should kill the locust, but not harm the other desirable regeneration. The prior stand was low quality hardwood. The terrain is steep.

Strata Recommendations

The long term goal for this strata is that it will be planted with loblolly pine to create a mixed pine/hardwood stand. In the future, it will be managed with adjacent Stand 4. It will be managed with periodic thinnings. Around age 40, the pine should be rotated out, leaving a well stocked stand of hardwood sawtimber. The hardwood should be managed with thinnings until it is age 60-70.

Activity Recommendations

This site will be planted with geneticly improved loblolly pine during the winter 2011-2012 at a rate of 435 trees/acre to create a mixed pine/hardwood stand. A survival check will be conducted the following fall/winter to ensure adequate stocking is achieved.

OTHER PLAN ACTIVITIES

Boundary Lines

Line Description

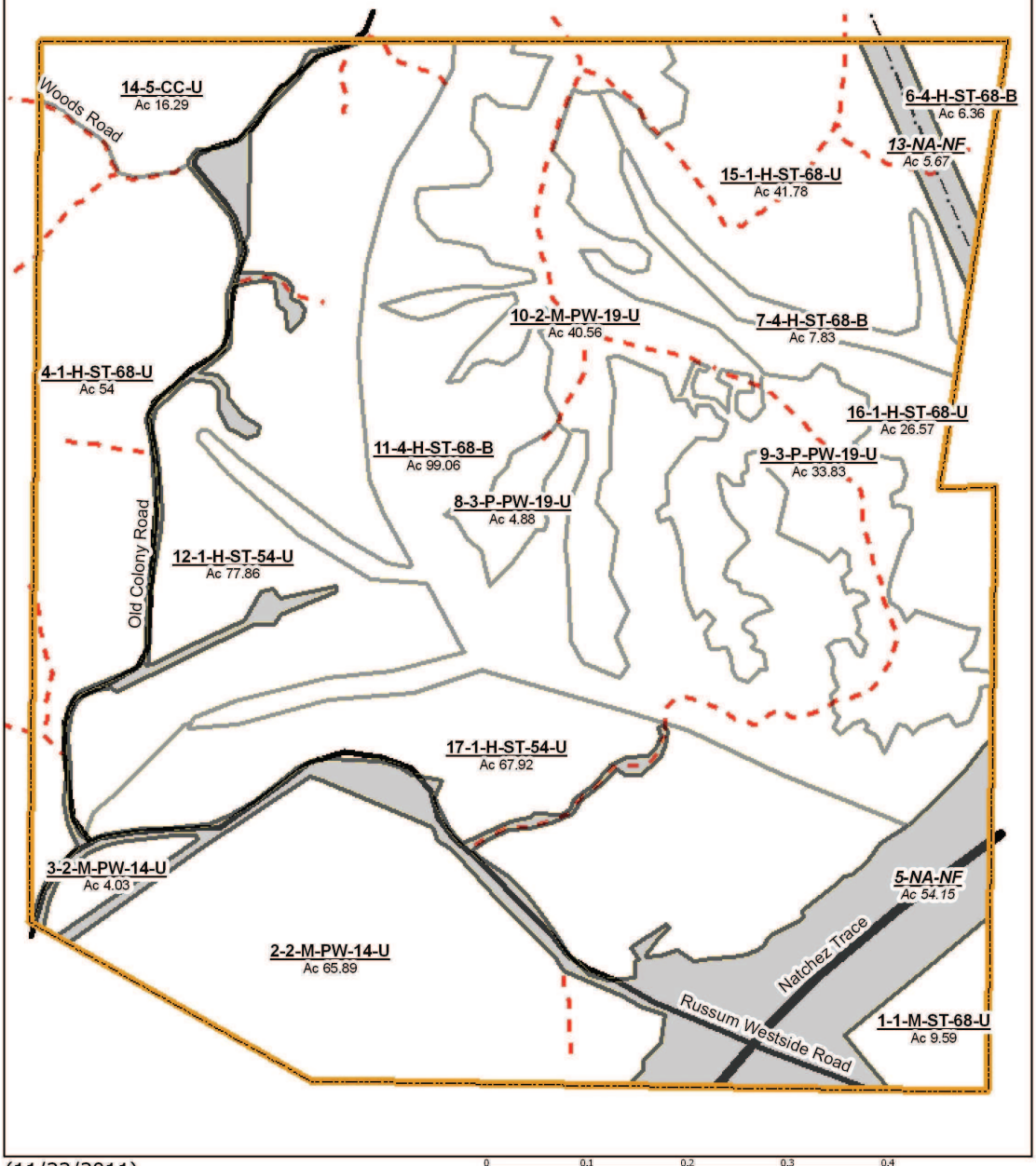
This section has 4 miles of boundary lines and around 3 miles of woods roads to maintain.

Line Recommendations

The property boundaries will be painted on a 6 year rotation beginning in 2012. The woods roads will be maintained as firebreaks on an "As Needed" basis.

STAND MAP - FY2012

Claiborne County Schools
Section 57, T11N, R2E, Claiborne County, Ms.
616.28 Acres



(11/22/2011)

Prepared by: Tommy Walker

LEGEND for Section 57, T11N, R2E, Claiborne County, Ms.

Property
- Property

Category 1: Stands
- Clear Cut
- Non-Stocked
- Reproduction
- Sub-Merchantable
- Pulpwood
- Chip-n-Saw
- Sawtimber
- Poles

Category 3: Non-Forest Stands
- Non-Forest

Property Roads/Trails
- Drive Ways
- Access Road
- Logging Road
- Skid Trail
- Farm Road
- Hiking Trail
- Horseback Riding Trail

Transportation (Lines)
- City Streets
- County Roads
- 3 Digit Highway
- Interstate Highway
- US Highway
- State Highway
- Natchez Trace Parkway

Transportation (Lines) (cont)
- Runways/Airports
- Active RR
- Abandoned RR

Utilities (Lines)
- Large Electrical
- Local Utility
- Large Pipeline
- Small Pipeline
- Gas Line
- Utility Line
- Water Line

Stand Activity Summary for
CLAIBORNE COUNTY SCHOOLS
57 11N 2E

Filters Applied:
County: Claiborne
Client Class: School Trust Land
District: Capital District
Client: CLAIBORNE COUNTY S
STR: 57 11N 2E
Activity:
Year: 2012 Through 2021

STR	Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
2012						
57 11N 2E	5	14	Regeneration, Artificial, Plant, Hand, Loblolly	16	$1,384.65	$0.00
57 11N 2E	5	14	Site Preparation, Chemical, Broadcast, Aerial, Combination	16	$1,920.00	$0.00
			Yearly Totals	32	$3,304.65	$0.00
2015						
57 11N 2E	2	2	Harvest, Mechanical, Thin, Machine, Loblolly	66	$2,310.00	$13,860.00
57 11N 2E	2	3	Harvest, Mechanical, Thin, Machine, Loblolly	4	$140.00	$840.00
57 11N 2E	3	8	Harvest, Mechanical, Thin, Machine, Loblolly	5	$175.00	$1,650.00
57 11N 2E	3	9	Harvest, Mechanical, Thin, Machine, Loblolly	34	$1,190.00	$11,220.00
			Yearly Totals	109	$3,815.00	$27,570.00
2016						
57 11N 2E	1	15	Harvest, Mechanical, Final, Machine, Misc Hardwood	42	$1,470.00	$61,320.00
57 11N 2E	1	16	Harvest, Mechanical, Thin, Machine, Misc Hardwood	27	$945.00	$11,475.00
57 11N 2E	2	10	Harvest, Mechanical, Thin, Machine, Misc Hardwood	41	$1,435.00	$6,314.00
57 11N 2E	4	6	Harvest, Mechanical, Thin, Machine, Misc Hardwood	6	$210.00	$3,505.50
57 11N 2E	4	11	Harvest, Mechanical, Thin, Machine, Misc Hardwood	99	$3,465.00	$57,840.75
			Yearly Totals	215	$7,525.00	$140,455.25
2017						
57 11N 2E	1	1	Harvest, Mechanical, Final, Machine, Misc Hardwood	10	$350.00	$18,650.00

STR	Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
57 11N 2E	1	4	Harvest, Mechanical, Final, Machine, Misc Hardwood	54	$1,890.00	$44,820.00
			Yearly Totals	64	$2,240.00	$63,470.00
2018						
57 11N 2E	1	15	Regeneration, Artificial, Plant, Hand, Loblolly	42	$3,551.30	$0.00
57 11N 2E	1	15	Site Preparation, Chemical, Broadcast, Aerial, Combination	42	$5,013.60	$0.00
			Yearly Totals	84	$8,564.90	$0.00
2019						
57 11N 2E	1	1	Site Preparation, Chemical, Broadcast, Aerial, Combination	10	$1,200.00	$0.00
57 11N 2E	1	1	Regeneration, Artificial, Plant, Hand, Loblolly	10	$850.00	$0.00
57 11N 2E	1	4	Site Preparation, Chemical, Broadcast, Aerial, Combination	54	$6,480.00	$0.00
57 11N 2E	1	4	Regeneration, Artificial, Plant, Hand, Loblolly	54	$4,590.00	$0.00
57 11N 2E	1	12	Harvest, Mechanical, Thin, Machine, Misc Hardwood	78	$2,730.00	$33,150.00
			Yearly Totals	206	$15,850.00	$33,150.00
2020						
57 11N 2E	2	2	Harvest, Mechanical, Thin, Machine, Loblolly	66	$2,310.00	$21,780.00
57 11N 2E	2	3	Harvest, Mechanical, Thin, Machine, Loblolly	4	$140.00	$1,320.00
57 11N 2E	3	8	Harvest, Mechanical, Thin, Machine, Loblolly	5	$175.00	$3,160.00
57 11N 2E	3	9	Harvest, Mechanical, Thin, Machine, Loblolly	34	$1,190.00	$21,488.00
			Yearly Totals	109	$3,815.00	$47,748.00
2021						
57 11N 2E	1	17	Harvest, Mechanical, Thin, Machine, Misc Hardwood	68	$2,377.20	$29,205.60
			Yearly Totals	68	$2,377.20	$29,205.60
			Grand Totals	**887**	**$47,491.75**	**$341,598.85**